

MASSACHUSETTS RARE AND ENDANGERED PLANTS

Scirpus longii (Pern.) Long's Bulrush

DESCRIPTION

Scirpus longii is a perennial wetland sedge of the Cyperaceae Family. Numerous long slender leaves are produced just above ground level; a colony of them assumes a ring-like formation. The stem grows up to 3 feet tall and is sheathed by a few long leaves that are 1/4-1/2 inch wide. The stem ends in an arching inflorescence containing as many as 1,000 spikelets. The base of the inflorescence is blackish and usually sticky to the touch. Spikelets are 1/3 inch long and usually composed of more than 60 flowers. The flowers produce tiny reddish-brown seeds about that are partially covered by blackish scales. From the seeds grow 6 long bristles which give the spikelet a hairy or woolly appearance at maturity. Scirpus longii grows from very thick underground stems (rhizomes) that are tough and fibrous.

SIMILAR SPECIES

Scirpus longii is similar to Scirpus cyperinus but is distinguished from the latter by the growth pattern of its basal leaves. Scirpus longii produces dense basal leaves which grow in a ring-like formation with a bare center and Scirpus



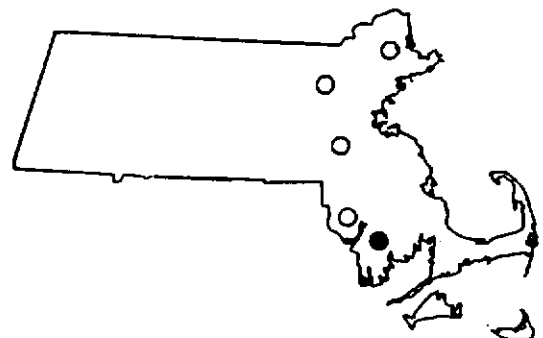
Scirpus longii: achene with bristles; leaf segment showing serrate keel and margins; scale of spikelet, spikelet.

Crow, Garret. 1982. New England's Rare, Threatened, and Endangered Plants. U.S. Fish and Wildlife Service. p. 49.

(continued overleaf)



Current distribution
of Scirpus longii



- Verified since 1978
- Reported prior to 1978

Distribution in Massachusetts by County

cyperinus produces dense basal leaves which lean outward from a thick clump. Additionally, Scirpus longii grows from a very thick (1/2 to 1 inch) rhizome whereas that of Scirpus cyperinus is substantially thinner (1/4 inch). Finally, the basal inflorescence is blackish in Scirpus longii as opposed to pale brown or greenish in Scirpus cyperinus.

RANGE

Scirpus longii is found sporadically along the Atlantic coast in Nova Scotia, Maine, Massachusetts, Rhode Island, Connecticut, New York, and New Jersey.

HABITAT IN MASSACHUSETTS

Long's Bulrush is found in a seasonally wet sedge meadow between a white cedar-red maple swamp and a disturbed regenerating pine barren. Dominant species which occur in Massachusetts with Scirpus longii include Calamagrostis canadensis, Carex lasiocarpa, Vaccinium macrocarpon, Eriophorum virginicum, Scirpus cyperinus, Carex bullata, Chamaedaphne calyculata, Cladium mariscoides, Juncus canadensis, and Woodwardia virginica. Formerly, Long's Bulrush occurred in Massachusetts in seasonally flooded sedge-grass meadows along the Ipswich, Charles, Neponset, and Alewife Rivers, but no extant populations have been found there.

POPULATION STATUS

Until recently, Long's Bulrush was believed extirpated from Massachusetts and was listed as such by the Massachusetts Division of Fisheries and Wildlife. Within the past year however, this plant has been discovered growing at one site, necessitating its redesignation from "Extirpated" to "Endangered." The rarity of this species is partly attributed to specific habitat conditions required for growth. It is a plant which depends on fire and low moisture conditions for flowering. Apparently, plants rarely produce flowering stems unless burned, although basal leaves are produced annually. When optimum conditions are not met, Long's Bulrush is infertile and reproduces vegetatively. Competition from Purple Loosestrife (Lythrium salicaria), control of natural fires, impoundment of rivers which maintains water at high levels, landfills, and dumping are also believed to contribute to the rarity of Long's Bulrush.